

BOROUGH OF DARWEN



ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
FOR THE YEAR 1949.

R. C. WEBSTER

B.Sc., M.D., D.P.H., D.C.H.



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Public Health Dept.
Darwen

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BOROUGH OF DARWEN

REPORT
ON THE
Health and Sanitary
Administration
OF THE BOROUGH
FOR THE YEAR 1949.

By R. C. WEBSTER, B.Sc., M.D., D.P.H., D.C.H.

Medical Officer of Health.

Members of the Public Health Committee.

1949-50.

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*ALDERMAN LADY HINDLE, J.P.

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Coun. E. YATES, JR., LL.B., J.P.

CHARLES COUTTS BYERS, TOWN CLERK.

* Members of the Public Health Sub-Committee.

Staff of the Public Health Department.

Officers.

Medical Officer of Health	R. C. WEBSTER, B.Sc., M.D., D.P.H.,
Divisional Medical Officer, Lancashire County Council	D.C.H.
Senior Sanitary Inspector	EDMUND P. McGLYNN, C.S.I.B.,
Inspector of Meat and Other Foods	Cert. Insp. Meat and Other Foods,
Director of Public Cleansing	Smoke Insp. (Cert.), M.S.I.A., M.R.San.I.
District Sanitary Inspectors	C. R. PALING, C.S.I.B., Cert. Insp. Meat and Other Foods, Smoke Insp. (Cert.), M.R.San.I., M.S.I.A.
Senior Clerk	H. RAMSBOTTOM, C.S.I.B., A.R.San.I., M.S.I.A.
	J. BAMFORD, C.S.I.B., A.R.San.I.
	N. RILEY. (Deceased 24/10/49)
	J. BOLTON. (Appointed 28/11/49.)
Clerical Staff	F. TOWNLEY. (Commenced 23/1/50.)
	A. ALSTON.
	Miss E. BARON.
	R. C. DAVIDSON. (Commenced 5/12/49.)
	Mrs. M. KAY. (Resigned 12/11/49.)

Clinics and Treatment Centres

Name of Clinic or Centre.	Situation.	Day and Time.	By whom provided.
Child Welfare.	Civic Health Centre.	Monday, 2 p.m. Thursday, 2 p.m.	Lancashire County Council.
Child Welfare.	Greenfield Institute.	Tuesday 2 p.m.	Lancashire County Council.
Ante-Natal.	Civic Health Centre.	Tuesday and Thursday, 9-30 a.m. Wednesday, 2 p.m. Alternate Tuesdays, 2 p.m. (Specialist).	Lancashire County Council.
Maternity and Child Welfare Dental.	Civic Health Centre.	Alternate Fridays, 2 p.m. and Tuesdays by appointment.	Lancashire County Council.
Diphtheria Immunisation.	Civic Health Centre.	Monday, 3-30 p.m.	Lancashire County Council.
Ultra-Violet Light.	Civic Health Centre.	Monday, 10 a.m. Friday, 2 p.m. Or by appointment.	Lancashire County Council.
School Dental.	Civic Health Centre.	Monday to Friday by appointment.	Lancashire County Council.
School Clinics.	Civic Health Centre.	Minor Ailments. Monday to Friday, 9 a.m. and 4 p.m. Saturday, 9 a.m. Tuesday and Friday, 2 p.m.	Lancashire County Council.
Ophthalmic.	Civic Health Centre.	Wednesday, 2 p.m.	Lancashire County Council.
Orthopædic.	Civic Health Centre.	Wednesday, 10 a.m.	Lancashire County Council.
Cardiac Clinic for Expectant and Nursing Mothers.	Health Department, Victoria Street, Blackburn.	Alternate Tuesdays by appointment.	Blackburn Corporation.
Cardiac Clinic for Schoolchildren.	Tullyallan Open Air School, Darwen.	By appointment.	Lancashire County Council.
Tuberculosis Dispensary.	20, Railway Road.	Monday, 10 a.m.	Lancashire County Council.
Venereal Diseases	Royal Infirmary, Blackburn.	Males—Tuesdays, 5 p.m. Friday, 7-30 p.m. Females—Monday, 5-30 p.m. Thursday, 5-30 p.m.	Lancashire County Council.



CIVIC HEALTH CENTRE,

DARWEN.

August, 1950.

TO THE CHAIRMAN AND MEMBERS OF THE PUBLIC HEALTH COMMITTEE

LADIES AND GENTLEMEN,

I have pleasure in presenting to you the Annual Report of the Public Health Department for 1949.

The Infant Mortality rate is the lowest yet recorded in Darwen; Maternal Mortality is nil; the incidence of infectious disease has been relatively low in general but measles was still prevalent. Five cases of acute poliomyelitis occurred and one of polio-encephalitis which was fatal.

These low mortality rates, and the general low incidence of infectious disease are satisfactory. Poliomyelitis causes concern, not only because of the serious results which may occur in individual instances among the small proportion of paralytic cases, but perhaps still more because there is as yet so much about the disease that is unknown, and because our ability to deal with it is so limited. But, it must be remembered that, relative to the whole population, it remains so far much less widespread than other grave infections have been, in even comparatively recent years. Even in the last ten years diphtheria was far more prevalent and caused many more deaths. It is not without significance that Darwen, like many other districts, does not (at present) need a fever hospital. But the picture is not uniformly bright. Housing problems continue to be the sombre background to Public Health work. It may be well to emphasise that housing **is** an important concern of the Public Health Department. Environmental conditions were of very great importance in an earlier phase of Public Health services, a century or more since. It was to matters of housing, water supplies, and sewage disposal, that much of the attention of the early medical officers of health was directed. In those days enteric fevers were common; infantile diarrhoea an annual scourge, cholera a recurrent terror. Nowadays there are Water Departments controlled by skilled engineers; the Public Health Act, 1936, lays down in ponderous words, not always easy to interpret, that "every house shall have within a reasonable distance a sufficient supply of wholesome water", and sewage disposal has attained a high standard, although, as

the Chief Sanitary Inspector's figures show, even in Darwen we still have 12 per cent. waste water closets and 1.2 per cent. pails, both obsolete methods. Nevertheless, the disappearance of cholera, the virtual abolition of enteric fever, are indices of what has been achieved. At a later stage Public Health services were directed to clinical matters, and the profound reduction in diphtheria, the rarity of rickets, the general well-being of children to-day, are in no small measure, due to the enlightened energy of Public Health authorities and their officials in the past 50 years. But all this still leaves us the housing problem. In some respects Darwen is better off than many areas. The grosser abominations, back to back houses, superimposed dwellings, are not now found here. Sixty-three new houses were completed during the year, but we are all painfully aware of long waiting lists, and of much physical and mental prejudice to health from lack of satisfactory housing. There are too many narrow sunless streets, too many "senile" houses being patched and repatched, too many houses without baths, and in other respects below modern standards. Housing is undoubtedly the gravest single problem in public health to-day. The ill effects of inadequate housing may be less dramatic than an outbreak of waterborne cholera or typhoid, but they are very real, and perhaps even more far-reaching. There is some encouragement in this depressing situation to be drawn from the reflection that the Authority has made bold use of the provisions of the Housing Acts to modify the ill effects of present conditions, and to keep a roof over the heads of many whose position would otherwise be truly desperate. The matter is also referred to in Mr. McGlynn's able statement on "Environmental Hygiene", it must indeed temper our satisfaction at the more pleasing points to be reported.

The Health Section of the report is much shorter than in former years as so many services have been transferred to Lancashire County Council, but the clinics continue to be in the capable and energetic hands of Dr. Millar and continue to be very fully used by the people of Darwen.

I have to thank Mr. McGlynn, the Chief Sanitary Inspector, and the Staff of the Health Department for their hard work and friendly co-operation.

During the year we lost Mr. Riley who had well and faithfully discharged the duties of Chief Clerk to the Department.

To you Mr. Chairman, and the Members of the Committee, may I express my thanks for your interest and kindness throughout the year.

I am, Ladies and Gentlemen,

Your obedient Servant,

R. C. WEBSTER,

MEDICAL OFFICER OF HEALTH.

PART I.

Statistics and Social Conditions

General Provisions of the Health Services

Prevalence and Control of Infectious Diseases

BY

R. C. WEBSTER, B.Sc., M.D., D.P.H., D.C.H.

MEDICAL OFFICER OF HEALTH

Summary of Statistics and Social Conditions, 1949.

GENERAL INFORMATION.

Geographical Position ...	Lat. $53^{\circ} 41' 25''$ N. Lon. $2^{\circ} 28' 32''$ W.
Elevation above sea level	500 ft. to over 800 ft.
Geological formation...Boulder, clay and sand, over coal measures.	
Area (in acres)	5,959
Population—Census, 1931	36,012
Population — Registrar-General's Mid-year Estimate for 1949	30,870
Number of Inhabited Houses—Census, 1931	10,258
Number of Inhabited Houses at end of 1949	10,468
Number of families or separate occupiers at Census, 1931	10,385
Rateable Value	£189,889
Sum represented by a Penny Rate	£752

The inhabitants are mainly of the artisan, or working class, and the principal industries are cotton weaving, paper making and staining, plastic and paint manufacturing and engineering trades.

Of a total of 14,060 insured adult persons, the average per cent. unemployed was .337 and of 825 insured juveniles, the average unemployed was .075 per cent. The corresponding figures for 1948 were:— Percentage adult unemployment, .9; percentage juvenile unemployment, 0.5.

SUMMARY OF VITAL STATISTICS.

	Males.	Females.	Total.		
LIVE BIRTHS:	Legitimate	203	230	433	
	Illegitimate	10	8	18	Birth-rate per 1,000 estimated population
	Total	213	238	451	mid-1949 14.6
STILLBIRTHS:	Legitimate	8	6	14	Rate per 1,000 total live and still
	Illegitimate	Nil	Nil	Nil	births 30
	Total	8	6	14	
DEATHS:				Death-rate per 1,000 estimated population	
				mid-1949—	
				Crude 17.0	
MATERNAL DEATHS.				Adjusted ... 15.1	
				Rate per 1,000	
				Deaths. Total Births	
	From puerperal and post-abortion sepsis	Nil	Nil	Nil	
	From other maternal causes	Nil	—	Nil	
	Total deaths	Nil	—	Nil	

**INFANTILE
MORTALITY.**
(Infants under
the age of
1 year.)

	Males.	Females.	Total.	Rate per 1,000 Live Births.
Legitimate Infants	4	9	13	29
Illegitimate Infants ...	Nil	Nil	Nil	Nil
Total Deaths	7	9	13	29

INFANTILE MORTALITY RATES.

Year.	Darwen.	England and	Smaller Towns
		Wales.	20,000 to 50,000.
1937	54	58	55
1938	58	53	51
1939	61	50	40
1940	72	55	54
1941	64	59	56
1942	57	49	46
1943	47	49	46
1944	46	46	44
1945	72	46	43
1946	34	43	37
1947	39	41	36
1948	31	34	32
1949	29	32	30

**OTHER
INFANT
DEATHS.**

		Rate per 1,000 population.
Deaths from Measles (at all ages)	Nil	0.000
Deaths from Whooping Cough (at all ages)	1	0.032
Deaths from Diarrhoea (under 2 years)...	1	0.032

Births.—The number of live births registered during the year was 451, giving a birth rate of 14.6 per 1,000 of the population. The trend of this rate over the past 21 years, in comparison with the rate for England and Wales, is shown in the following table:—

Year.	DARWEN.			Rate per 1,000	ENGLAND AND WALES. Rate per 1,000		
	No. of Births.						
	Male.	Female.	Total.				
Average for 1929 to 1938	199	195	394	11.35	15.2		
1939	161	181	342	10.9	15.0		
1940	167	171	338	11.1	14.6		
1941	190	173	363	12.1	14.2		
1942	191	177	368	12.5	14.0		
1943	213	212	425	14.9	16.5		
1944	220	192	412	14.53	17.6		
1945	205	183	388	13.72	16.1		
1946	265	230	495	16.5	19.1		
1947	303	274	577	19.0	20.5		
1948	257	244	501	16.2	17.9		
1949	213	238	451	14.6	16.7		

Illegitimate Births.—The following table shows the number of illegitimate births and deaths for the period 1929 to 1949:—

Year.	No. of Births.	Rate per cent. of Live Births.	No. of Deaths under 1 year.	Death Rate per 1,000 Illegitimate Live Births.
Average for 1929 to 1938	14	3.61	1.6	114
1939	12	3.50	Nil	Nil
1940	10	2.95	1	100
1941	19	5.23	1	52
1942	14	3.80	1	71
1943	28	6.58	Nil	Nil
1944	28	6.79	4	142
1945	32	8.25	3	93
1946	30	6.45	1	33
1947	21	3.64	Nil	Nil
1948	15	3.00	1	66
1949	18	3.99	Nil	Nil

Stillbirths.—The table given below sets out details relating to stillbirths for the past ten years:—

Year.	No. of Stillbirths.			Rate per 1,000 Live Births.	Rate per 1,000 Population.	
	Legiti- mate.	Illegiti- mate.	Total.		DARWEN.	ENGLAND AND WALES.
1940	17	Nil	17	47	0.56	0.55
1941	6	6	12	32	0.40	0.51
1942	15	2	17	44	0.58	0.54
1943	22	2	24	53	0.84	0.51
1944	21	1	22	53	0.77	0.50
1945	13	Nil	13	32	0.46	0.46
1946	11	Nil	11	21	0.37	0.53
1947	14	2	16	27	0.53	0.50
1948	12	Nil	12	24	0.39	0.42
1949	14	Nil	14	30	0.45	0.39

Deaths.—The number of deaths of Darwen residents which occurred during the year was 525, representing a death rate of 1,000 of the population of 14.6.

The trend of the death rate of the Borough for the past 21 years is shown below in comparison with the rate for England and Wales:—

Year.	DARWEN.		ENGLAND AND WALES. Rate per 1,000.
	Total Deaths.	Rate per 1,000.	
Average for— 1929 to 1938	515	14.9	12.1
1939	495	15.7	12.1
1940	534	17.6	14.3
1941	462	15.4	12.9
1942	416	14.2	13.9
1943	497	17.4	12.1
1944	429	15.1	11.6
1945	440	15.5	11.4
1946	496	16.6	11.5
1947	486	16.0	12.0
1948	461	14.9	10.8
1949	525	14.6	11.7

The following is a copy of the information supplied by the Registrar-General of the causes and sex distribution of deaths of Darwen residents. The information does not include non-civilian deaths:—

Cause of Death.	Males.	Females.	Total.
Typhoid and paratyphoid fevers	—	—	—
Cerebro-spinal fever	—	—	—
Scarlet fever	—	—	—
Whooping cough	—	1	1
Diphtheria	—	—	—
Tuberculosis of respiratory system	5	4	9
Other forms of tuberculosis	—	1	1
Syphilitic diseases	—	1	1
Influenza	1	—	1
Measles	—	—	—
Acute polio-myelitis and polio-encephalitis ..	—	1	1
Acute infective encephalitis	—	—	—
Cancer of buccal cavity, and œsophagus (M) uterus (F)	2	5	7
Cancer of stomach and duodenum	9	8	17
Cancer of breast	—	6	6
Cancer of all other sites	26	20	46
Diabetes	1	3	4
Intra-cranial lesions	27	42	69
Heart disease	80	114	194
Other diseases of circulatory system	5	8	13
Bronchitis	16	18	34
Pneumonia	3	5	8
Other respiratory diseases	4	4	8
Ulcer of stomach or duodenum	1	3	4
Diarrhoea under 2 years	—	1	1
Appendicitis	—	—	—
Other digestive diseases	—	5	5
Nephritis	5	7	12
Puerperal and post-abortion sepsis	—	—	—
Other maternal causes	—	—	—
Premature birth	2	2	4
Congenital malformation, birth injuries, etc.	3	6	9
Suicide	1	2	3
Road traffic accidents	—	2	2
Other deaths by violence	11	9	20
All other causes	22	23	45
TOTALS	224	301	525

General Provisions of Health Services.

A comprehensive range of services is maintained by the Local Health Authority Lancashire County Council, including Ante-Natal Clinics, Child Welfare Clinics, Ultra-Violet Light Clinics, Speech Therapy Clinics and other School Health Services.—Medical and Dental.

Ambulance service is provided by Lancashire County Council.

Hospital services are provided by Manchester Regional Hospital Board, including general hospital facilities in Blackburn and a Maternity Home in the former Darwen Infectious Diseases Hospital at Bull Hill.

LABORATORY FACILITIES.

The Pathological and Bacteriological Department of the Blackburn and East Lancashire Royal Infirmary undertook all Public Health laboratory work for the Borough of Darwen, on 5th July, 1948, in accordance with the Government scheme now being officially carried out in this area by the Manchester Regional Hospital Board.

Prevalence and Control of Infectious Diseases.

The numerical and age incidence of infectious diseases, other than tuberculosis, is shown in the following table, which includes particulars of Darwen cases notified and accepted, cases removed to hospital, and deaths from infectious diseases. The so-called minor infectious diseases, other than measles and whooping cough, are not included in the table, as they are not notifiable in Darwen and, therefore, statistics as to their incidence are not reliable.

Disease.	Cases Notified and Accepted										Hospital.		
	Total Cases at all Ages.	Years.									Total Deaths	Total Cases removed to Hospital from district	Deaths in Hospital of persons belonging to district
		Under 1	1	3	5	10	15	25	45	65 and over			
Smallpox	75	...	6	15	21	17	6	10	...	...	...	49	...
Scarlet Fever .....											...
Diphtheria (including Membranous Croup)	4	...	...	1	1	1	.	1	...	...	...	4	...
Enteric or Typhoid Fever (excluding Paratyphoid) .....	...	...	...	...	...	...	...	...	...	...	...	...
Paratyphoid Fever..	1	...	...	...	...	...	...	...	1	...	...	1	...
Measles (excluding Rubella)	314	9	122	112	69	1	...	1	...	...	...	...	...
Whooping Cough ...	72	8	24	23	17	...	...	...	...	...	1	1	1
Acute Pneumonia (Primary and Influenzal)	33	7	...	...	1	...	7	...	7	11	1	2	...
Puerperal Pyrexia...	4	...	...	...	...	...	...	4	...	...	...	1	...
Cerebro-spinal Fever	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomyelitis.	5	...	1	3	...	...	1	...	...	...	...	...	...
Acute Polio-encephalitis	1	...	...	...	...	...	1	...	...	...	1	1	1
Acute Encephalitis Lethargica .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia Neonatorum	1	1	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	3	...	...	...	...	...	1	...	1	1	...	...	...
Malaria— Contracted in:													
This Country ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Abroad .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Gastro Enteritis .....	...	...	...	...	...	...	...	...	...	...	...	...	...
Food Poisoning .....	...	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS	513	25	152	152	112	19	15	17	9	12	3	64	2

Measles continued to be widely prevalent in 1949, but such cases as occurred were generally mild and recovered rapidly. One case of Ophthalmia Neonatorum was notified during the year.

Four cases of Diphtheria occurred during the year, these were of a mild form. Two cases had not been immunised, and two cases had been immunised a number of years ago.

The following table gives the comparative incidence of infectious diseases during the past five years:—

Disease.	1945	1946	1947	1948	1949
Scarlet Fever	54	42	25	134	75
Diphtheria	2	2	1	1	4
Enteric Fever	1	...	...	...	...
Measles	107	27	316	487	314
Whooping Cough	18	14	55	119	72
Pneumonia (Acute primary and Acute influenzal)	4	9	17	21	33
Puerperal Pyrexia	1	...	3	1	4
Cerebro-spinal Fever	1	...	...	1	...
Cerebro-spinal Meningitis.....	...	...	...	...	...
Ophthalmia Neonatorum	1	5	3	5	1
Erysipelas	4	2	...	4	3
Dysentery .....	...	1	1	1	...
Acute Poliomyelitis .....	...	...	3	...	5
Acute Polio-encephalitis .....	...	...	...	...	1
Gastro-Enteritis .....	...	...	...	1	...
Paratyphoid Fever .....	...	...	...	...	1
Food Poisoning .....	...	...	...	...	...
TOTALS	193	102	424	775	513

TUBERCULOSIS. Cases of Tuberculosis were admitted to various Sanatoria under the Regional Hospital Board.

The Tuberculosis Scheme is administered by the Lancashire County Council and Regional Hospital Board, but the Area Tuberculosis Officer and Nurse maintain close co-operation with the Public Health Department, furnishing particulars about housing conditions, and environment generally. The necessary disinfection is carried out by the Public Health Department.

The following table shows the age group incidence of new cases of tuberculosis notified, and the deaths from the disease, during 1949:—

Age Periods.	NEW CASES.				DEATHS.			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory.	
	M.	F.	M.	F.	M.	F.	M.	F.
Years.								
0—1 .....	...	...	...	...	...	...	...	...
1—2 .....	...	1	...	...	...	...	...	...
2—5 .....	...	...	2	...	...	...	...	...
5—10	1	...	2	2	...	...	...	...
10—15 .....	...	1	...	...	...	...	...	...
15—20	1	...	...	...	...	...	...	...
20—25 .....	...	2	1	...	...	3	...	...
25—35	3	6	...	...	2	1	...	...
35—45	1	1	...	...	...	*	...	...
45—55 .....	...	...	...	...	1	*	...	...
55—65 .....	...	1	...	...	2	...	...	...
65—75 .....	...	...	...	...	...	...	...	...
75 and upwards...	...	...	...	...	...	...	...	...
TOTALS	6	12	5	2	5	5	...	...
	<u>18</u>		<u>7</u>		<u>10</u>		<u>...</u>	

* Death from Tuberculosis of a Case not notified.

**NATIONAL
ASSISTANCE
ACT, 1948.
SECTION 47.**

One case was taken under this section. An order was obtained. The person concerned was accommodated for three months in Part III accommodation provided by the Lancashire County Council and was subsequently rehoused by the Darwen Corporation.

(NOTE.—She died a few months later.)

PART II. ENVIRONMENTAL HYGIENE.

Sanitary Circumstances of the Area
(including Public Cleansing)

Housing, and

Inspection and Supervision of Food

BY

E. P. McGLYNN, Esq., M.R.S.I., M.S.I.A., Etc.

SENIOR SANITARY INSPECTOR AND
DIRECTOR OF PUBLIC CLEANSING.

Sanitary Circumstances of the Area.

WATER.

Reservoirs.—Water is supplied on the constant system from the following reservoirs:—Sunnyhurst Hey, Earnsdale and Bull Hill, of which the first two are open, and the last closed. All the water is from moorland gathering grounds. Water in the Bull Hill Reservoir is supplied from Bolton.

Purification.—All water is sandfiltered and chlorinated.

Supply.—The approximate number of dwelling houses supplied direct is 10,350.

There is now one supply by standpipe of town's water to serve three houses lying at a lower level than the northern face of the Council's controlled tip where a roadside well was the former sole source of supply. As the houses are some distance from the mains and are in any case scheduled for radical treatment under the Housing Act, the piping of separate supplies to the houses was not considered justified.

SAMPLING.

Chemical.—Four samples of water from public supplies were submitted for analysis during the year.

All were satisfactorily reported upon.

Bacteriological.—Fifteen samples of drinking water were submitted for bacteriological examination, fourteen from public supplies and one from a private supply.

The fourteen from public supplies were satisfactorily reported upon, whilst the sample from a private supply was unsatisfactorily reported upon; this is being kept under observation and follow-up samples taken.

The table below gives the closet accommodation in the Borough:—

Pails	147
Water Closets	10531
Waste Water Closets	1798
Cesspools	1
Total	12477

Conversions and Installations during 1949—

New Water Closets fixed	109
Premises with one New Closet fixed	33
Premises with more than one New Closet fixed	9
Waste Water Closets converted to Water Closets	67
Latrine Closets converted to Water Closets	9
Pail Closets converted to Water Closets	1
Baths installed during the year	43
Urinals installed during the year	11
Waste Water Closets dismantled	0

Routine testing, inspection, repair and renewal of existing drains and sewers continued within the limits of availability of staff, material and labour.

It is hoped that closet conversions, on an increasing scale as labour and materials become available, will result in the total abolition of the 1798 waste water closets.

RIVERS AND STREAMS.

The river is seriously polluted by industrial waste effluents. In addition there is a certain amount of material dumped in the river by children and careless householders.

The river is frequently inspected and every effort made to prevent pollution wherever the sources are discoverable.

SANITARY INSPECTION OF THE AREA.

Number of houses visited	1536
Number of houses visited (Housing Consolidated Regulations, 1925 to 1932) ...	52
Number of inspections of Schools	3
Number of inspections of Factories and Workplaces	178
Number of inspections of Municipal Hostel	52
Number of inspections of Bakehouses	34
Number of inspections of Dairies and Cowsheds	78
Number of inspections of Refuse Tips	72
Complaints received and investigated	546
Number of re-inspections made	6075
Visits paid to houses (re cases of Infectious Diseases)	133
Number of rooms disinfected	163
Number of articles disinfected	133
Number of smoke observations taken	21
Number of drains, etc., tested	334
Total number of defects discovered	3694
Informal notices served	3694
Statutory notices served	134
Number of nuisances abated, including outstanding nuisances from previous year	1648

LIST OF NUISANCES DISCOVERED.

Defective drains	115
Choked sewers	8
Defective soilpipes and water closets	124
Defective downspouts, easing troughs, roofs and external walls	275
Defective plastering	651
Dirty houses and premises	0
Dangerous buildings	31
Dirty and dilapidated closets	147
Accumulations of refuse	0
Defective or uneven gullies	46
Insanitary sinks	17
Defective fire ranges	94
Broken slop-pipes	13

Defective tippers of waste water closets	13
Choked waste water closets	63
Choked water closets	26
Insanitary yards	45
Defective internal floors	173
Insufficient ventilation	315
Burst water pipes	40
Defective wash boilers	33
Miscellaneous nuisances	1060

SHOPS.

Routine inspections are made and special inspections as occasion requires, but pressure of other work especially housing has limited visitation far below the level regarded as desirable.

SMOKE ABATEMENT.

Twenty-one smoke observations were taken during the year, and advice and instruction to stokers on firing and use of fuel, to secure as far as possible the prevention of black or heavy smoking, were given.

DISINFESTATION.

During the year ten houses were found to be infested with bedbugs and/or vermin, and of these ten had been disinfested by the end of the year, gaseous fumigation and spraying being the methods employed.

SCHOOLS.

The conversion of latrine closets is now complete with one exception only where the future of the School itself is uncertain but is under present consideration by the Education Authority.

OFFENSIVE TRADES.

The following are established in the district:—Two tripe boilers, one fat extractor, and one fat melter.

MUNICIPAL HOSTEL.

This is the only common lodging house in the town and is municipally owned and managed. The average daily number of lodgers for the year was:—Males 142.26. Females 15.59.

FACTORIES.

Two hundred and twelve routine and special visits were paid to factories with and without mechanical power during the year for purposes of the provisions as to health. Defects found (chiefly in connection with sanitary conveniences) were notified to occupiers and by the end of the year were either completed or in hand. Pressure of other work still reduces routine visiting far below the level considered desirable.

As previously, the fullest co-operation was maintained between the Department and H.M. Inspector of Factories.

**CHIEF
SANITARY
REQUIREMENTS
OF THE
DISTRICT.**

The chief sanitary requirements of the district are:—
The conversion of pail and waste water closets ;
The paving, culverting, embanking and, as far as possible, purification of the river ;
The clearance of derelict and neglected sites ;
The control of promiscuous tipping ;
The paving of back streets and unmade roads ;
The reduction of the number of private water supplies and the purification and protection of the remainder ;
The conversion of latrine closets at schools and factories.

VEHICLES.

The whole of this important sanitary service is under the control of the Public Health Department. It comprises the collection and disposal of household and trade refuse and the cleansing of streets.

The refuse collection and disposal service is now completely mechanised, the new tractor-drawn trailer tank for night-soil collection being now in use for one day per week.

**SNOW
REMOVAL AND
DEFROSTING
OF ROADS.**

The department is now wholly responsible for the above. Main and secondary roads, bus routes, and factory approach roads are priorities for treatment.

Two Bunce Snowploughs, one for use with the Tractor, one for a Bedford lorry have been improved and reconditioned for use with light or moderate snowdepths.

For heavy snow the County Council have stationed at Darwen for use here and in adjacent County Districts, a heavy Canadian Mack Lorry, and a heavy duty Cuthbertson Hydraulic Lift Plough, capable of dealing with deep-drifted snow. In addition the Department has purchased a heavy duty Single Blade Johnson Plough for use in deep snow in narrow roads. A spare Johnson High Wing V-Plough, formerly used by attachment to a Transport Depot Single-decker 'Bus is now held for use with our own vehicles.

**REFUSE
DISPOSAL.
SALVAGE.**

The system of controlled tipping continues to prove very successful. The Corporation-owned Bull Hill Tip is the only one now in use. It is situated near the Southern boundary of the Borough which makes the length of haul from the Northern half somewhat excessive. It is hoped to find a suitable tip-site nearer the centre of the town in order to lessen this.

The pre-separation of salvable material from household refuse is still conscientiously carried out by the bulk of householders.

During the year as is generally known, the demand for waste paper slumped and many local authorities were left with vast quantities of baled waste paper on their hands, some even having to resort to burning or dumping through lack of storage space. We were fortunately not compelled to do that, and our stocks were gradually disposed of to our regular merchants. The price, however, had fallen considerably which reduced the income to the department for salvage much below what had been estimated.

The following is a summary of the materials sold during the year—

	Tons.	Cwts.
Clean Waste Papers	223	0
Ferrous Metals—Baled Tins	27	15 <i>1</i>
,, ,, Black Scrap	16	11
Non-Ferrous Metals	Nil	Nil
Textiles—Rags, Carpets	7	0
Waste-Foods—Pigswill (after boiling)	271	0
,, ,, Household Bones	0	6
	<hr/>	<hr/>
Total	545	12 <i>4</i>
	<hr/>	<hr/>

The total value of the salvaged materials sold was £1,594.

SUMMARY.

The following is a summary of the work done during 1949. It should be noted that the weights given below are estimated.

	Tons.	Cwts.	Qrs.
House Refuse to Tip (4184 loads)	6579	10	0
Market and Trade Refuse to Tip (274 loads) ...	409	17	0
Receptacles Emptied (House Refuse)	315865		
Receptacles Emptied (Trade Refuse)	17873		
Excreta		105 Loads	
Excreta Pails Emptied		4686	
Sludge from Street Gullies		296 Loads	
Street Gullies Emptied		16239	
Sweepings: Bins from Street Orderly Trucks ...	7071		
Salt Distributed on Streets		105 Tons	
Grit Distributed on Streets		50 Tons	
Length of Streets Salted or Gritted		366 Miles	
Dust Bins added during the year		83	
Number of Portable Refuse Receptacles	12072		

Environmental Hygiene.

In February, 1949, as a consequence of many protracted and repetitious discussions in Committee and elsewhere on the necessity for, and the extent and cost of repairs to houses the Senior Sanitary Inspector prepared and presented to the Health Committee a Review entitled Environmental Hygiene. This is re-printed herewith not merely to give the report archival form, but also because its reading or re-reading may prove a useful iteration of the basic duties of the Local Authority in the sphere of Public Health, and a background against which to see in proper proportion and perspective particular problems which, seen in isolation, often assume unreal and formidable outlines.

INTRODUCTORY.

At this point in history when extensive social legislation has transferred to central or regional authorities so many of the duties and functions formerly exercised by local authorities, it might be as well if we were to take stock of what duties remain to us.

Leaving aside altogether any question as to whether the policy which has resulted in the transfer is the wisest or the best, and whether the transferred services will be administered with that overall increase of efficiency which was the reason and the object of the transfer, we must now accept that they have gone. At the same time we must not forget that what remains to us is one of the most vital services that can be administered by the Local Authority in the sphere of Public Health; and despite its magnitude and complexity, it is in my view well within the Local Authority's competence; and indeed could not be successfully administered except by people with a wealth of accumulated local knowledge, an inheritance of local achievement and an initiative intensified and energised by local patriotism. This service may be most fittingly named Environmental Hygiene.

ENVIRONMENTAL HYGIENE DESCRIBED.

Perhaps the easiest way in which to understand all that is comprehended in the term Environmental Hygiene, and to see in the gross all the services and their ramifications that it embraces, as well as those which may develop or accrue to it, we should consider in its simplest form the life of man.

When we do, we see it as a picture in which man is the central figure against the background of physical nature. And the instantaneous fact that strikes us is that he is always at war, not in the limited sense that he is fighting with his fellows in successive wars of aggression, defence, expansion or aggrandisement, but in the truer and wider sense that he is constantly in conflict on the purely physical plane with factors far more insidious, and in the long run far more destructive, than embattled armies or, as far as we yet know, the ammunition of atomic arsenals. These factors are, first, the principles of decay and dissolution which inhere in the very fact that he is mortal; and, secondly, all the external physical world insofar and to the extent that *its* nature is inimical to *his*—chiefly and ultimately the multitudinous forms of microbic life which may invade and lay waste to his system.

But we see in this picture too that man does not fight alone. In modern civilisation there are ranged alongside him to make issue with these powerful adversaries two potent allies—the personal medical services, and the environmental hygiene services.

The personal medical services, recruited, organised, and deployed, watch over man's physical welfare from the cradle to the grave. To this end the Medical Practitioner, the Medical Officer, the Gynaecologist, the Radiologist, the Orthopedist, the Orthodontist, the Health Visitor, the Nurse and a host of other specialists are concerned with the human being as an organic entity, the highest form of life, with this primary object: that it may realise, exercise and enjoy to the full all the rich potentialities, mental and physical, with which it is individually endowed.

And so its birth, growth and development are watched and measured (I don't mean in any ultrascientific or paternalistic sense) defects and abnormalities corrected, disease fought, arrested, warded off or cured, and its general well-being continuously sought after. And the personal medical services with all the apparatus of healing with which medical science can furnish them carry out these beneficent offices with unremitting zeal.

Now if each of us lived in an hermetically sealed envelope, isolated from the rest of the world, and drawing our sustenance from some secret and unimpeachable source, nothing further would be required. But we don't. The rest of the picture shows that we live not in an envelope but in an environment; not in isolation but in community; not alone and trailing clouds of glory do we come and go in this world, but very much one of many and trailing in glorious crowds.

The very air we breathe, the ground beneath our feet, the houses we live in, the streets we traverse, the halls we enter, the factories we work in, the country we walk in, the people we mix with, in short the whole external world: all this is our environment.

And the dull, brute, inescapable fact is that environment may undermine and overturn all the good that the personal medical services do or seek to do, if it is not so constituted and conditioned as to foster and encourage, instead of to militate against and inhibit, the free growth and development of the human organism.

It is here then that the Environmental Hygiene Services enter to play their part. They contemplate all the factors and conditions, organic and inorganic, external to the human body, and examine them in relation to their effects upon it; and, where those effects are adverse, modify, adapt, and even uproot and rebuild, the conditions that engender them. And so whilst the personal medical services wage war on the enemies within the citadel of the human body, the Environmental Hygiene Services wage war on those without. Separately and alone each army, each group, would fight a losing battle: together, in combined operation and intelligent liaison, their strength is mutually augmentative.

The personal medical services now operate under the Ministry of Health and the large local government units—the County Councils and the County Boroughs—who are its executives for that purpose.

But the Environmental Hygiene Services are still the concern, and a very vital concern, of every Local Authority; services whose efficient administration brings incalculable benefit to the community; services which give scope for illimitable development; services which demand the skill and scientific acumen of technical officers and the time, thought, and energies of local authority members. So let us now look at what these services comprise.

In describing environment a little earlier in this paper I began by saying the very air we breathe is part of our environment, and I can do no better now than show how one of the first duties of Local Authority is in relation to the air.

AIR.

We can live three weeks without food, three days without water, but we can't live three minutes without air. We depend for our lives on an abundant and continuous supply of air which carries life-giving oxygen through the lungs to the blood, and which, along with food and drink, gives colour to the cheeks, brightness to the eye, vitality to the heart and energy to the limbs.

It is, therefore, important that the supply of air be kept as pure as possible wherever we breathe it—in our houses, in our factories and offices, in public halls and places of entertainment, in the streets, the town and the country. And so it is that Public Health legislation enacts measures for the prevention of atmospheric pollution of various kinds—smoke, dust and offensive odours—and for airspace round houses and buildings, and for the ventilation of houses, factories and so forth. This involves planning by architects and engineers, inspection and control by Sanitary Officers, and the formation and pursuit of enlightened policy by Local Authorities.

It is obvious that in this sphere alone, though much progress has been made in the past, a vast programme still faces us for the future.

THE GROUND BENEATH OUR FEET.

We can best realise how large and important a part Public Health legislation and Local Authorities have played and must of course continue to play here, if we cast our minds back to the conditions which prevailed a couple of hundred years ago.

Then: Streets were unpaved, undrained and unswept; refuse, garbage and indescribable household filth were thrown on to the common causeway, were trampled on and scattered by foot and horse traffic alike, so that in the richest cities, more even than in the poorest hamlets, the streets were paved not with gold but with ordure. No wonder then that plague, fever and disease were rife.

Now: Streets are paved, drained, seweried and swept and perhaps the one blot that remains is the still common fouling of footways by dogs, at large or in charge of careless owners, and by expectorations.

THE HOUSES WE LIVE IN.

This is by far the largest and the most difficult problem in the whole vast circle of Environmental Hygiene. It is this that is the daily concern of every part of government, local and national, and it is probably more pressingly felt locally than nationally, because the personal element in it has not become arid and lifeless by statistical sterilisation. It is **your** family, **your** friends, **your** neighbours, **your** townsmen, who suffer and suffer grievously if Environmental Hygiene does not ensure that the houses they live in are so made and maintained as to provide shelter, comfort and convenience for the occupants. And if **they** suffer **you** suffer too, not in the figurative sense that you sympathise deeply with them, but that the physical evils resulting from bad housing conditions are not confined to the houses or the families in which they first arise. So important is it that a people should be well-housed that the spearhead of social legislation for the past three quarters of a century has been aimed and driven at obliterating the blot on our civilisation that spread its stain over the fair face of our country as the Industrial Revolution ran its headlong course.

It is to this problem I propose to devote the greatest proportion of this paper because, not only is it the most important with which Local Authorities have to deal; but because so many people have never seen it whole; or have lost sight of its nature and implications; or have viewed it from too narrow an angle and seen it distorted, or, finally, are dismayed by the radical nature of the solution.

The problem is far too serious and too widespread to be shirked, and it is this fact that lays upon Local Authorities by far the weightiest of all their civic obligations; and neither elected representative nor official can be true to his trust if he fails to face the problem or discharge the obligation, however unpleasant it may prove to be to do it. It matters not that bad houses are a legacy of shortsightedness and lack of planning (if nothing worse) handed down to us; nor that interim patching and tinkering have done little to arrest an obvious process of decay; nor that two wars and their aftermath have hastened it. No armchair criticism, no global generalisations, no theoretical recasting of the historical scene, no censuring of our forerunners, are of the slightest avail—it is quite futile to attempt to backdate the millennium. The problem is here and now—and it is ours.

I am not in this paper concerned with the shortage of houses but with the repair, reconditioning or demolition of existing houses. To be repaired or not to be repaired—that is the question. And it is no mere academic one. Whichever alternative you choose you are immediately face to face with severe practical issues.

If to repair—then the cost of repairs must be faced, and faced though they have risen so steeply that, contrasted with original property costs and present rent-levels, they constitute an entirely disproportionate charge on the property, which in most cases converts it into a liability on the landlord throughout the probable life of the house.

If not to repair—then the provision of new houses on a scale hitherto never envisaged must be faced, because it is certain that, if the houses are not to be repaired, they cannot long continue to be lived in, because danger to health, life and limb is an ever-present and increasing risk in their occupation in their present state.

But the decision to repair or not to repair is not, even so, so simple or so clear cut. The Local Authority cannot by a mere fiat sweep away three thousand houses (which is roughly the number of houses in Darwen needing treatment) and build a new small town to replace them. In the best of all possible worlds that would undoubtedly be the ideal solution. But for a variety of reasons we are not, and do not seem likely to be, living in such a world, and we are therefore bound to look the present world and the present problem straight in the face.

Now the Local Authority has certain obligations laid upon it by law with respect to housing—notably by the various Public Health Acts and by the Housing Acts. And these obligations, stated as shortly as possible, are as follows:—

Public Health Acts.—Under various sections of these Acts the Local Authority must cause its district to be inspected **so as to discover and remedy all those defects or conditions in houses which render them a nuisance or prejudicial to health.** This covers roofs, walls, ceilings, floors, yards, conveniences, and drainage of all kinds.

Housing Acts.—These march alongside but go further than the Public Health Acts and require the Local Authority to cause its district to be systematically inspected so as to discover which of its houses are **in any respect unfit** for human habitation.

In 1919 the Ministry of Health issued a Manual on Unfit Houses which gave the following standard for a fit house—

“ It should be:—

- (1) Free from serious dampness;
- (2) Satisfactorily lighted and ventilated;

- (3) Properly drained and provided with adequate sanitary conveniences, and with a sink and suitable arrangements for the disposal of slop water;
 - (4) In good general repair;
- And should have:—
- (5) A satisfactory water supply;
 - (6) Adequate washing accommodation;
 - (7) Adequate facilities for preparing and cooking food;
 - (8) A well-ventilated food store."

In 1946 the "Report of the Standards of Fitness for Habitation Sub-Committee of the Central Housing Advisory Committee" recommended the following standard:—

"The dwelling should:—

- (1) Be in all respects dry;
- (2) Be in a good state of repair;
- (3) Have each room properly lighted and ventilated;
- (4) Have an adequate supply of wholesome water laid on for all purposes inside the dwelling;
- (5) Be provided with efficient and adequate means of supplying hot water for domestic purposes;
- (6) Have an internal or otherwise readily accessible water-closet;
- (7) Have a fixed bath preferably in a separate room;
- (8) Be provided with a sink or sinks and with suitable arrangements for the disposal of waste water;
- (9) Be provided with facilities for domestic washing, preferably in a separate room;
- (10) Have a proper drainage system;
- (11) Be provided with adequate points for artificial lighting in each room;
- (12) Be provided with adequate facilities for heating each habitable room;
- (13) Have satisfactory facilities for preparing and cooking food;
- (14) Have a well-ventilated larder or food store;
- (15) Have proper provision for the storage of fuel;
- (16) Have a satisfactory surfaced path to outbuildings and convenient access from a street to the back door."

The Sub-Committee said of this standard: "We would emphasize that it represents a target to be aimed at and that it is intended to secure conditions that may be regarded as satisfactory, not merely at present, but for a substantial number of years to come. It is intended to secure a house which, when improved (to this standard) will bear comparison with what is regarded as proper to a new dwelling—subject of course, to the physical limitations of the particular house".

It will be observed that items (5), (7), (9), (11), (12), (15) and (16) are new compared with the 1919 standard and the Sub-Committee realised "that the improved standard may not be fully realisable for some time owing to the amount of building work which has accumulated during the past seven years".

But even if the Local Authority measures its responsibilities against the old standard, it is plain that an immense programme of repair and reconditioning of houses

confronts it, or an equally vast programme of new house-building. Because it is against item 2 of the new standard or item 4 of the old (they are practically identical) that the houses we are considering offend, that is to say they are in an extremely bad state of general repair.

Now when a Local Authority through its Sanitary Inspector becomes aware of houses which are not in all respects fit for habitation, it has the duty of—

- (a) requiring owners to carry out works of repair; (in the event of their failure to do so the Local Authority may do the work themselves).
- or (b) making demolition orders in respect of individual houses not capable of being rendered fit at a reasonable expense.
- or (c) making clearance orders in respect of areas in which the houses are by reason of disrepair or sanitary defects unfit for human habitation, with a view to the demolition of all the houses in the area.

Before it can proceed under (c) above it has to satisfy the Minister of Health that it can provide housing accommodation in advance of displacements of tenants which will occur as demolition proceeds, **AND THAT THE LOCAL AUTHORITY'S RESOURCES ARE SUFFICIENT FOR THE PURPOSE.**

If, however, owners or interested parties object to the proposals of the Local Authority to make a clearance area, the Minister will hold a local inquiry at which objections will be heard, and it is by no means certain that the objections would be overruled. On the contrary, unless the standard by which the Ministry of Health judge houses in potential clearance areas is raised very much higher than it was twenty-five years ago, the exact opposite is certain.

A further difficulty and a very real one is that many owner-occupied houses in a very good state of repair are to be found in all the blocks of property which we are considering; these could not possibly be represented as unfit, and if the surrounding or adjoining houses were condemned they would have to be sliced away from the fit houses leaving them like staring monoliths in a wilderness of cleared sites.

Conversely, large numbers of single unfit houses are found interspersed in rows of good houses. If they were condemned they would have to be excised, leaving ugly, asymmetrical, and unæsthetical gaps.

Bearing all these facts in mind, let us look at the position in Darwen—

1. About 700 houses are tentatively scheduled for demolition at some future date.
2. About 3,000 are in need of extensive general repair, the cost of which per house amounts to anything from £100 to £500 with an average of £150/250.
And this does not include the provision of any of the additional amenities mentioned in the new housing standards.

We need only deal with group 2 here, and the question the Local Authority has to settle is whether those repair-costs represent reasonable expense and thus justify it in requiring the repairs to be carried out. Now what is reasonable expense? Here are the comments of the Committee who prepared the report I have been quoting:—

“ Some local authorities in determining whether a house is or is not capable of being rendered fit for habitation at reasonable expense have taken as a guide a ratio between the estimated cost of the work and the value which it is estimated the house would have after completion of the repairs. One Joint County Advisory Committee on Rural Housing has suggested to its constituent authorities that a study of Court decisions indicates that it is safe to issue repair notices when the

estimated cost of repair does not exceed 50 per cent. of the **estimated value of the house when work is completed**. Another such Committee has suggested a proportion of **two-thirds of the value**. A suggested basis for a revised definition put before us in evidence goes even further in this direction by providing that—

“**If by the expenditure of a sum of money on the reconstruction of an old building, the effect shall be such that the resultant building becomes a satisfactory habitable house complying with the Housing Act and the Bye-laws of the Local Authority, and at a cost appreciably less than that of erecting a new house of similar accommodation, such cost shall be considered ‘reasonable expense’ under the meaning of the Act.”**

Another suggestion which has been made is that a multiple of the rateable value of the house should be used. Twelve times the rateable value of the house has been suggested for this purpose.

It will be observed that there is no unanimity of opinion as to how any extended definition should be framed. It was pointed out to us in evidence that the cost involved would often reach a figure which would be appreciably beyond the capacity of the owner concerned or which would not bear any reasonable relationship to the existing rentals.

We, therefore, suggest that it is undesirable to attempt to lay down any hard and fast rule either by reference to a multiple of the rateable value or to a fixed ratio between the estimated cost of the work and the estimated value of the property after the work has been done, as to whether expenditure to the house should be regarded as reasonable or not. What is reasonable expenditure is likely to vary according to the supply and cost of new houses and the availability of materials.”

Finally, “There is no known method or rule of deciding reasonable expense, and at the present time there is no more perplexing problem in the whole field of housing administration.”—(*Stewart Swift.*)

It is obvious from this that Local Authorities have been finding that though the cost of repairs may, at first sight, seem excessive weighed against the original cost of the house, or even against its normal value, nevertheless the cost may be regarded as reasonable in view of the facts—

- (a) that an extended useful lease of life is given to the houses;
- (b) that the occupants thus remain in houses that are reasonably fit for human habitation;
- (c) that they therefore cease to be a potential danger to the community from the point of view of public health;
- and (d) that the Local Authority is not faced with the almost impossible task of rehousing them.

Three further considerations may here be taken into account.

First, it is generally recognised that present rent levels are too low, and that it is an injustice that though the cost of property-upkeep has been trebled or quadrupled due to labour and material costs, and though, in the main, tenants' incomes have been doubled by rising wage-rates, the rents remain unchanged.

Second, (a counterbalancing consideration) that in most cases it is due to long years of neglect (and not all of it attributable to the stringencies of war) that repairs of the present magnitude have become necessary.

Third, the Housing Act contemplates the necessity of expending large sums on repairs from time to time over and above the normal upkeep or maintenance costs, and for that reason has made provision for the advance to owners by the Local Authority of such sums, (under certain safeguards and certain conditions of repayment), or alternatively, for the repayment by instalments, of expenditure by the Local Authority in the execution of repairs in default.

Housing Summary.--I have endeavoured in this section to show the size of the problem facing local authorities in this phase of Environmental Hygiene. It is, as I said at the outset, by far the largest and quite the most difficult. At the same time I have tried to indicate as briefly and clearly as possible, what are the Local Authorities' duties and responsibilities in the matter, since only by knowing them can they formulate, implement and guide a housing policy.

OTHER ENVIRONMENTAL HYGIENE SERVICES.

In order that this paper may not run to too great length, I propose to notice only briefly the rest of the Environmental Hygiene Services; though I would first wish to stress that they are not the less important for that reason. Indeed, of course, they are all interdependent and interlocked; none can be neglected without detriment to the rest; the efficiency of each adds to the efficacy of the whole; and though in even their most successful operation there is not that dramatic or spectacular element which may sometimes attend the achievements of the personal medical services, it is nevertheless true that without them the whole scheme of Public Health Services would be disrupted, and its structure collapse.

It is to be remembered that all the Environmental Hygiene Services are working for man's welfare simultaneously and in unison, and at all points of his contact with the external world.

They visit the factory he works in to ensure that the conditions under which he earns his daily bread are not prejudicial to his health—ventilation, warmth, light, drainage, conveniences, washing facilities, cloakroom and canteen arrangements—all these are their concern.

In shops and offices they watch over his welfare in the same way. And in schools.

At the same time wherever he is they are providing him with an adequate and wholesome supply of water for drinking, cooking and ablutionary purposes.

And not the least of their activities centres round the food that he eats, its production, storage, distribution, purity and quality; the hygiene of the premises it is prepared in and of the containers it is sold in.

All this goes on mostly unnoticed, sometimes unknown. It is not claimed that any of the services are perfect in their organisation, their operation or their personnel; nor—in this imperfectible world—that they ever will be. But whatever their claims, their aim at least is quite clear—and that is to protect man as far as possible from any and all conditions of his environment which, whether from natural or human agency, impede or frustrate his due and healthy development and his enjoyment of life.

It is this work which remains to Local Authorities—member and officials alike—to do. Even in so bald a synopsis as has only been possible in this paper, the vastness of the undertaking must be plain. And it must also be plain that to partake in that work with full knowledge of all that it entails calls for the highest qualities of determination, patience, wide human understanding and technical skill, coupled with a devotion to duty that can withstand the irritating pinpricks of petty and uninformed criticism, and pursue an undeterred and steady course to the end.

HOUSING.

The table below gives particulars of action taken specifically under the provisions of the Housing Acts in contradistinction to action under the Public Health Acts.

STATISTICS.

Number of new houses erected during the year—

(a) Total (including numbers given separately under (b))	63
(i) By the local authority	60
(ii) By other local authorities	0
(iii) By other bodies or persons	3
(b) With State assistance under the Housing Acts—	
(i) By the local authority (included under (a) (i) above)	60
(ii) By other bodies (included under (a) (iii) above)	0

1. Inspection of dwelling-houses during the year—

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	406
(b) Number of inspections made for the purpose... 4011	
(2) (a) Number of dwelling-houses (included under sub- head (1) above) which were inspected and recorded under the Housing Consolidated Regulations 1925 to 1932	52
(b) Number of inspections made for the purpose... 179	
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	8
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	398

2 Remedy of defects during the year without service of
formal notices—

Number of defective dwelling-houses rendered fit in con-
sequence of informal action by the local auth-
ority or their officers

40

**STATISTICS
(continued).**

3.	Action under statutory powers during the year—	
	(a) Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936—	
	(1) Number of dwelling-houses in respect of which notices were served requiring repairs	88
	(2) Number of dwelling-houses which were rendered fit after service of formal notices—	
	(a) By owners	9
	(b) By local authority in default of owners ...	23
	(b) Proceedings under Public Health Acts—	
	(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	53
	(2) Number of dwelling-houses in which defects were remedied after service of formal notices—	
	(a) By owners	2
	(b) By local authority in default of owners ...	11
	(c) Proceedings under Sections 11 and 13 of the Housing Act, 1936—	
	(1) Number of dwelling-houses in respect of which Demolition Orders were made	0
	(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	0
	(d) Proceedings under Section 12 of the Housing Act, 1936—	
	(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	0
	(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	0

STATISTICS
(continued).

4. Housing Act, 1936.—Part IV.—Overcrowding—

(a) (i) Number of dwellings overcrowded at the end of the year	0
(ii) Number of families dwelling therein	0
(iii) Number of persons dwelling therein	0
(b) Number of new cases of overcrowding reported during the year	0
(c) (i) Number of cases of overcrowding relieved during the year	0
(ii) Number of persons concerned in such cases...	0

OVERTRODING.

“Overcrowding” as to mixed sexes in families, not involving legal overcrowding is fairly common in two-bedroomed houses, and is a problem aggravated by the acute housing shortage.

**GENERAL
OBSERVATIONS.**

The chief difficulty is the inability to secure extensive repairs by informal action, with the result that statutory procedure has to be invoked with all the additional work and time involved.

Inspection and Supervision of Food.

MILK SUPPLY.

There were 63 dairy farms on the register at 30th September, 1949, when supervision of milk production passed from the local authority to the Ministry of Agriculture and Fisheries. Fifty-three visits of inspection were made up to this date. A further twenty-five visits were made to the end of the year.

SAMPLING.

Biological.—Fifty-two samples were submitted for guinea pig inoculation. Fifty-one gave negative results, one gave a positive result. This latter was notified to the County Council and subsequently investigations were carried out by the Veterinary Section of the Ministry of Agriculture and Fisheries and any necessary action taken.

Notification was also received during the year from the County Council of the result (also positive) of examination of a sample of milk from a local producer taken otherwise than by the Local Authority. Again investigations were carried out by the Ministry of Agriculture and Fisheries and any necessary action taken.

Bacteriological.—Eighty-four samples were examined during the year, of which sixty-two were satisfactory and twenty-two unsatisfactory. The unsatisfactory samples were mainly of designated milks failing to comply with one or other of the prescribed tests. Steps were taken to ascertain and remedy the cause, and unsatisfactory results were referred to the Ministry of Agriculture and Fisheries where appropriate.

Chemical Analysis of Milk.—See tables on page 38.

MEAT AND OTHER FOODS.

The Public Abattoir was closed in June, 1942, in pursuance of a Ministry of Food Scheme for further centralising slaughtering.

Butchers' and other food shops, stalls and vehicles, and premises used for the preparation of human food are regularly inspected.

The amount of food examined, certified unfit, and either destroyed or utilised after sterilisation for animal feeding stuffs, was as shown in the table on page 39.

No legal proceedings were necessary in respect of unsound food during the year.

There were no cases, or suspected cases, of food poisoning during the year.

The Local Authority by direction of the Minister is the Food and Drugs Authority for the Borough.

Close co-operation is maintained with the Public Analyst whose advice and help are always available and much valued.

The quality of the food sold in the district is generally good.

FOOD AND DRUGS SAMPLING.

SAMPLES REPORTED GENUINE.

No. of Samples.	Description.	Formal.	Informal.
69	Milk.	69	—
7	Ice Cream.	—	7
1	Self-Raising Flour.	—	1
1	Frying Fat.	—	1

SAMPLES REPORTED NOT GENUINE.

Cons. No.	No. of Samples.	Description.	Formal.	Informal.	Result.	Action taken.
1	1	Milk	x	—	Deficient 3.3% fat.	Vendor warned. Follow up sample genuine.
2	1	Milk	x	—	Deficient 1.1% Solids - not - fat. 0.5% extraneous water.	Vendor cautioned. Follow up sample genuine.
3	1	Milk	x	—	2.6% extraneous water.	Further samples taken.
4	1	Milk	x	—	Deficient 6.0% fat, 12.2% solids - not - fat. 13.9% extraneous water.	
5	1	Milk	x	--	Deficient 0.6% solids - not - fat. 14.5% extraneous water.	Follow up samples for comparison with sample No. 3. Vendor prosecuted. Fined £33 3s. 0d. with £5 2s. 6d. costs.
6	1	Milk	x	—	Deficient 21.7% solids - not - fat. 20.4% extraneous water.	
7	1	Milk	x	—	Deficient 6.8% solids - not - fat. 5.3% extraneous water.	Vendor prosecuted. Fined £9 16s. 0d. with £5 9s. 0d. costs. Assistant prosecuted and fined £1 0s. 0d.
8	1	Milk	x	—	Deficient 5.0% fat. Low in solids-not-fat.	Vendor cautioned. Follow up samples genuine.
9	1	Milk	x	—	Deficient 14.0% fat. 0.5% extraneous water.	Vendor cautioned.
10	1	Stew	—	x	Alkaline re-action due to excess Na ₂ CO ₃ .	
11	1	Self-Raising Flour	—	x	Excess Na ₂ CO ₃ . Slight excess sulphide.	
12	1	Ice Cream	—	x	Fat 1.9%. Total solids 24.2%. Poor in fat.	Samples taken at request of owner. Vendor and Ministry of Food notified.

TABLE SHOWING AMOUNT AND NATURE OF FOOD CONDEMNED DURING 1949.

Amount.	Nature of Food.	Amount.	Nature of Food.	Amount.	Nature of Food.
				cwts.	lbs.
145 tins	Assorted Vegetables.	54 tins	Sausages.		
2 tins	Apple Sauce.	636 tins	Spaghetti.	106	Dates.
201 tins	Beans.	322 tins	Soup.	9	Fish.
1 tin	Dehydrated Onions.	16 tins	Tomatoes.	0	Macaroni.
149 tins	Fruit.	193 tins	Tomato Purée.	4	Margarine.
127 tins	Fish.	10 boxes	Dates.	1	Meat.
3 tins	Grapes.	1 bottle	Pickled Gherkins.	5	Potatoes.
4 tins	Jam.	1 bottle	Vinegar.	38	Spaghetti.
79 tins	Meat.	4 jars	Piccalilli.	20	Tomatoes.
18 tins	Meat and Vegetables.	1 jar	Honey.	5	Onions.
		45 jars	Sandwich Spread.	4	Oats.
341 tins	Milk.	132 pkts	Ice Cream.	26	Onion Powder.
4 tins	Marmalade.	15 bags	Self-Raising Flour.		
81 tins	Onion Powder.				
1 tin	Orange Juice.				
1086 tins	Puddings.				
2 tins	Pickles.				
2 tins	Rabbit.				

**RATS AND
MICE
DESTRUCTION.**

Investigation and disinfection proceeded steadily throughout the year, and it has become increasingly obvious that the initial survey and co-ordinated treatments, and especially the comprehensive and radical treatment of the sewers, have reduced to a very low level the degree of infestation in the town. This has been maintained now for four years, and it is expected that regular re-survey, sewer maintenance treatment and block control, will keep it there.

The following table gives a summary of the work done throughout the year—

No. of premises inspected.	No. of premises found infested.	No. of treatments carried out.	Estimated kill of rats.		Cumulative total of rats killed since inception of service.
			Killed	prior to January, 1949.	
323	64	70		447	9999 10,446

SEWER TREATMENTS.

Date.	No. of manholes treated	Estimated kill.
May	199	48
November	70	55

Special Report on Cleansing Service.

In August, 1949, as a result of the increasing intervals between collections of refuse coupled with the increased cost of the Cleansing Department, an exhaustive report was prepared and submitted to the Cleansing Committee giving as briefly as compatible with clarity the history of refuse collection during the past twenty years, and recording the multiplicity and variety of factors adversely affecting the cost and frequency of refuse collection which had come into play during that period.

The tables and summaries which constituted the bulk of the report are reproduced in the following pages for purposes of reference.

One other factor not mentioned there which has come into occasional prominence is the poor quality of many deliveries of household fuel which, apart altogether from its wastefulness in combustibility, greatly increases the bulk and weight of unburnable residue going into the bins, thus affecting the number of bins-to-vehicle load and slowing down the collection rate.

E. P. McGLYNN,

DIRECTOR OF PUBLIC CLEANSING.

TABLE 1.
TABLE SHOWING POPULATION, NUMBER OF RECEPTACLES, CLEARANCE-FREQUENCY, LENGTH OF HAUL AND COST OF SERVICE.

Year.	Popula-tion.	No. of inhabited houses.	No. of Receptacles. †	No. of Receptacles emptied during year.	Average Clearance-Frequency.	Point of Disposal.	Average length of haul	No. of vehicles employed.	Cost of Service. * £
									6
1928	38,150	10,422	10,916	360,172	33 per year	11 "	"	"	11,206
1929	37,780	10,418	10,938	360,781	33 per year	11 "	"	"	11,227
1930	37,780	10,489	11,025	383,915	35 per year	10½ "	"	"	10,629
1931	36,420	10,450	11,067	383,461	35 per year	10½ "	"	"	10,619
1932	35,580	10,466	11,163	404,040	36 per year	10 "	"	"	10,564
1933	34,780	10,450	11,299	412,809	36 per year	10 "	"	"	11,016
1934	34,180	10,457	11,483	440,850	38 per year	9½ "	"	"	11,554
1935	33,670	10,394	11,579	475,715	41 per year	9 "	"	"	11,784
1936	33,060	10,358	11,627	523,816	45 per year	8 "	"	"	12,153
1937	32,280	10,258	11,724	537,973	46 per year	8 "	"	"	12,407
1938	31,850	10,355	11,765	540,366	46 per year	8 "	"	"	10,788
1939	31,160	10,367	11,786	499,634	42 per year	8½ "	"	"	10,443
1940	30,210	10,394	11,804	432,145	37 per year	10 "	"	"	11,638
1941	29,820	10,371	11,821	363,655	30 per year	12 "	"	Sandy Lane	12,638
1942	29,270	10,258	11,840	317,395	27 per year	13 "	"	"	12,813
1943	28,430	10,382	11,862	338,845	29 per year	12½ "	"	"	12,784
1944	28,340	10,374	11,869	381,131	32 per year	11½ "	"	"	13,278
1945	28,270	10,368	11,872	381,646	32 per year	11½ "	Bull Hill	"	14,018
1946	29,830	10,374	11,900	434,093	33 per year †	11 "	"	"	15,062
1947	30,250	10,416	11,931	336,524	28 per year	13 "	"	"	17,358

Note the uninterrupted increase in the number of refuse receptacles despite a continuous decline in population. (Cols. 2 and 4.)

* Note 2 See Table VI for effect of wage increases.

+ Note 3 Inception of operation of 44 hour (5 day) week.

See Tables II. and III for effect on number of bins emptied and weight of refuse removed.

† Note 4 The conversion of ashes tubs to metal dustbins took place gradually until the end of 1937. The reduced capacity of bins is partly reflected in the fact that in 1947 there were 1,000 bins more with a population of 30,250 and 10,416 inhabited houses than in 1928 with a population of 38,150 and 10,422 inhabited houses. But see also Item 6 on Table IV.

TABLE II.

TABLE OF COMPARISON SHOWING COLLECTION FREQUENCIES AND INTERVALS BETWEEN COLLECTIONS FOR EACH VEHICLE FOR THE SEVEN MONTHLY PERIODS BETWEEN OCTOBER, 1947, AND APRIL, 1948, AND OCTOBER, 1948, AND APRIL, 1949.
 Frequency of Collections from October, 1947, to April, 1948.
 Intervals between collections, in days.

No. 2 VEHICLE.	8	8	9	10	9	12	11	14	17	13	13	9	9	10	12	12	12
No. 3 VEHICLE.	11	10	8	11	10	6	7	8	8	9	15	15	14	13	13	17	16
No. 4 VEHICLE.	10	8	7	8	13	7	8	9	10	18	12	13	9	13	9	10	15
No. 6 VEHICLE.	9	11	9	12	10	11	9	12	21	16	15	13	14	13	12	19	14

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Frequency of Collections from October, 1948, to April, 1949.
 Intervals between collections, in days.

No. 2 VEHICLE.	7	8	12	8	11	15	8	10	15	14	14	15	14	14	14	17	
No. 3 VEHICLE.	10	8	9	8	11	11	13	15	24	18	15	21	16	19	21	.	
No. 4 VEHICLE.	7	7	8	7	7	8	9	10	9	15	18	10	12	10	13	12	10
No. 6 VEHICLE.	8	8	10	9	10	11	10	14	25	15	14	15	16	17	19	.	

The Longest interval between two collections is in Black Figures in each case.
 See also Table III. for the comparative numbers of bins emptied and the weight of refuse moved during the same periods.
 See also Table IV. for factors affecting rate of collection.

TABLE III.

**TABLE SHOWING COMPARISON* BETWEEN REFUSE REMOVED DURING
SEVEN MONTHS OF 1947-48 ON A 48 HOUR WEEK AND THE SAME
MONTHS DURING 1948-49 ON 44 HOUR (FIVE DAY) WEEK.**

Seven months during 1947-48 on 48 hour week.

		Loads.	Bins.	Tons.	Cwts.
October,	1947	363	40864	544	10
November,	1947	334	31509	501	0
December,	1947	371	31585	556	10
January,	1948	411	24787	605	10
February,	1948	376	27421	564	0
March,	1948	379	30393	568	10
April,	1948	422	33332	633	0
		—	—	—	—
		2656	219891	3973	0
		—	—	—	—

Corresponding seven months during 1948-49 on 44 hour week.

		Loads.	Bins.	Tons.	Cwts.
October,	1948	359	39258	538	10
November,	1948	396	37742	594	0
December,	1948	369	31189	553	10
January,	1949	376	21021	564	0
February,	1949	365	23642	547	10
March,	1949	408	27500	612	0
April,	1949	350	22212	525	0
		—	—	—	—
		2623	202564	3934	10
		—	—	—	—

* Note that the comparison is a general and not an absolute one since conditions (e.g., sickness, weather, etc.) cannot be identical from month to month or even day to day.

See also Table IV. for factors affecting rate of collection.

TABLE IV.

SUMMARY OF FACTORS AFFECTING COLLECTION FREQUENCY.

1. VEHICLES AND PERSONNEL.

In 1928 there were **6** horses and carts removing house refuse, and **one** motor collecting house refuse from the outskirts. Each vehicle had **3** effective loaders.

From **1939** to date **4** motor vehicles have dealt with all the house refuse. Each vehicle has **4** loaders.

2. LENGTH OF HAUL.

Up to **1938** when controlled tipping was started all the refuse was brought to the destructor situated in the centre of the town.

From September, 1938, to April, 1940, the refuse was taken to Bull Hill Tip.

. From April, 1940, to March, 1945, the refuse was taken to Sandy Lane Tip, just over the North boundary of the town.

From March, 1945, to date all the refuse has been tipped at Bull Hill.

The gradient from the centre of the town to the Bull Hill Tip has its effect on both time and cost factors for **loaded** vehicles traversing it.

3. WEATHER.

Winter conditions affect the collection frequency in two ways because the department is responsible (since in 1941 with no increase in either vehicles or personnel the Department took over all these duties) for the whole of road treatment for ice, and for snow removal, and therefore a proportion of the vehicles is tied up treating roads at a time of the year when refuse is at its heaviest both in weight and quantity. This, plus holidays and sickness, has a retardant effect on collection which is often not completely redressed till two or three months later.

4. HOLIDAYS.

Increased holidays obviously decrease the rate of collection, and the effect again is felt long after the annual "wakes" week.

5. SICKNESS WITH PAY AND DEARTH OF LABOUR.

Both operating together slow up the collection rate.

6. SALVAGE.

The separate collection and packing of Salvage into bags and trailers increases the time spent at each house; and the very great increase over the past twenty years of various household commodities formerly sold loose but now packed in containers, has had a marked effect on the **bulk** of material to be collected.

7. BIN RENEWAL.

During the past five years the rate of bin replacement has gone up sharply and the delivery of new bins has a noticeable effect on the refuse collection on delivery days when the old bin is brought away and the new one left in its place.

TABLE V.
TABLE SHOWING THE TOTAL COST OF THE CLEANSING SERVICE
FROM 1928-29 TO 1947-48.

Year.	Expenditure. £	Year.	Expenditure. £
1928-29	11,206	1938-39	10,788
1929-30	11,227	1939-40	10,443
1930-31	10,629	1940-41	11,638
1931-32	10,619	1941-42	12,638
1932-33	10,564	1942-43	12,813
1933-34	11,016	1943-44	12,784
1934-35	11,554	1944-45	13,278
1935-36	11,784	1945-46	14,018
1936-37	12,153	1946-47	15,062
1937-38	12,407	1947-48	17,358

See Tables VI. and VII. for factors affecting increase in cost.

TABLE VI.
TABLE SHOWING WAGE INCREASES FROM MARCH, 1936, TO MARCH 1949.

	Carter	Heavy Driver	Light Driver	Salvage Hand and Tipman and Loader	Sweeper	Weeder	Mechanic
Mar. 1936	49/0	—	—	47/0	45/4	31/2	—
Oct. 1936	49/0	—	—	48/11	47/1	33/2	—
Jan. 1937	52/9	—	—	52/9	47/1	33/2	—
Oct. 1938	54/8	—	—	54/8	48/10	34/11	—
June, 1939	—	68/0	—	54/8	50/9	34/11	—
Dec. 1939	—	71/0	—	57/8	53/9	37/11	—
Dec. 1940	—	73/0	65/0	59/8	55/9	37/11	—
Feb. 1941	—	76/0	68/0	62/8	58/9	39/2	81/6
Oct. 1941	—	79/0	71/0	65/8	61/9	42/2	81/6
May 1942	—	82/0	74/0	68/8	64/9	45/2	82/0
Dec. 1942	—	83/6	75/6	70/2	66/3	46/8	83/6
May 1943	—	85/6	77/6	72/2	68/3	48/8	85/6
Jan. 1944	—	87/6	79/6	74/2	70/3	50/8	87/6
April 1944	—	87/6	79/6	76/1	72/2	52/7	96/0
Sept. 1945	—	92/0	84/0	80/7	76/8	57/1	100/0
Dec. 1945	—	98/0	90/0	86/7	82/8	63/1	100/0
Aug. 1946	—	102/1	94/1	90/8	86/9	67/1	100/0
Nov. 1946	—	104/1	96/1	92/8	88/9	69/1	100/1
April 1947	—	107/4	99/4	94/11	91/0	71/4	122/0
July 1948	—	113/4	105/4	100/11	97/0	76/4	122/0
Mar. 1949	—	113/4	105/4	107/0	100/0	79/4	124/8

No. of Drivers	6	Increase in wage bill 1949 over 1936 ...	936
No. of Loaders	18	" " "	2808
No. of Sweepers	12	" " "	1768
No. of Weeders	2	" " "	250
No. of Salvage hands....	4	" " "	624
No. of Tipmen	3	" " "	468
			£6854

TABLE VII.

SUMMARY OF FACTORS INDUCING A RISING COST OF
THE CLEANSING SERVICE.

1. Wage increases. (See Table VI.)
 2. Sickness with pay scheme. Substitute labour, when available, means additional expenditure.
 3. Holidays with pay.
 4. Increased cost of materials (e.g., Dustbins from 6s. 7d. in 1936 to 22s. 4d. at present).
 5. Increased cost of vehicle repairs and renewals. (A sufficient renewals fund to cover the replacement of vehicles at the end of a ten years' life was not built up, with the result that new vehicles constitute heavy items of capital expenditure.)
 6. Bin replacement: The bins supplied originally on the change-over from ashes-tubs are rapidly wearing out and being replaced in large numbers. The new bins though (as noted in 4 above) much more expensive, are not of the same robust quality and therefore have not the same life as the old ones.
 7. Winter Road Treatment: The cost of snow ploughs, gritters, salt; the destructive action of salt on the vehicles resulting in increased maintenance and repairs; the overtime costs in connection with road treatment (most of the work is done at night time); all these factors have a big influence on the cost of running the Department.
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